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ABSTRACT

The number of gifted students in high school vocational agriculture classes has increased four-fold in the last five years, according to a study of enrollment, methods of identification, curricular, and co-curricular and career awareness activities available to gifted students in schools offering vocational agriculture in the United States. A survey, mailed to a sample of Pennsylvania agriculture teachers in 224 departments and a random sample of 100 other vocational agriculture teachers in the United States, their 324 school administrators, and their gifted vocational agriculture students who graduated from 1974 to 1979, found 317 identified gifted students enrolled in vocational agriculture (extrapolated to show 22,000 enrolled at the national level). It also showed that gifted students are most often identified by means of IQ tests and/or nominations by teachers. Both teachers and administrators surveyed wanted information on how to teach the gifted, and on flexible and challenging programs. In addition, survey results showed that very few vocational agriculture teachers conducted career awareness programs for gifted students prior to their enrollment in vocational agricultural courses. (The report contains information on how the sample population was selected, the questionnaires used, and a bibliography.) (KC)

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STATUS OF GIFTED STUDENTS IN VOCATIONAL AGRICULTURE CLASSES IN THE UNITED STATES

Project No. 404-10-8962

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FINAL REPORT

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Volume 21, Number 2

September 1980

Pennsylvania Department of Education
Bureau of Research and Evaluation
Research Coordinating Unit
for Vocational Education

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Status of Gifted Students in Vocational Agriculture Classes in the United States.

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May 30, 1980

The purpose of the project was to collect information regarding the present status of gifted students including the areas of: total enrollment, identification, curricular and co-curricular activities, and career awareness activities available to gifted students in Pennsylvania and the United States vocational agriculture (vo. ag.) classes. Findings of this study should aid in the better preparation of present and future gifted students in vocational agriculture.

Objectives

1. To explore the current enrollment status of gifted students in vo. ag. classes in Pennsylvania and the United States.
2. To identify the different methods used by schools for identification of gifted students.
3. To explore the availability of career awareness education and the availability of curricular and co-curricular activities for gifted students who have enrolled in vo. ag.
4. To explore the opinions and knowledge of vo. ag. teachers and their administrations toward gifted students and their programs.
5. To explore the present status of gifted students who graduated from high school vo. ag. classes from 1974 to 1979.

Outcomes

1. In the last five years, the enrollment of gifted students in vo. ag. classes has increased four-fold. According to the survey, at present there are 317 identified gifted students enrolled in vo. ag. This means approximately 22,000 are enrolled at the national level.
2. IQ tests and/or nomination by teachers are the most widely used by schools for the identification of the gifted.
3. Very few vo. ag. teachers conducted career awareness programs for gifted students before they enrolled in vo. ag.

4. The need for information on how to teach the gifted in vo. ag. classes was indicated by the teachers and their administrators.

5. The need for flexible and challenging programs was indicated by the teachers and administrators.

Audience

The findings of this research are useful to school teachers, administrators, researchers, and students in the better preparation of gifted students in vo. ag.

Publication and Available Materials

Final report.

Thesis

ACKNOWLEDGEMENTS

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INTRODUCTION

The forgotten student on the American scene is the gifted and talented student interested in vocational education. There is ample evidence to indicate that both parents and educators of students with outstanding abilities direct, counsel, and even force them into a college-bound curriculum in high school. For most of the estimated 3 to 5 percent of the school population who are defined as gifted and talented, the alternative of choosing a life satisfying career through vocational education, including vocational agriculture, has been discouraged.

Philosophy of Vocational Agriculture and Gifted Student

Vocational agriculture educators' interests have always been people-oriented. The responsibility of the educators has been that of preparing the individual for the world of work by providing him/her with a marketable or saleable skill. The true meaning of democracy supports the concept of the individual being the fundamental unit in society, and teaching the individual is a sound principle of vocational agriculture. Truly, vocational agricultural education has recognized this perhaps more than any other segment of our schools (Love, 1978).

In this society, there is a general acceptance of the idea that the individual is of the utmost importance and that opportunities should be provided for the optimal development of each (Love, 1978). Implementing this concept is the supreme test of any educational system or program, including vocational agricultural education. If one accepts these concepts, beliefs and principles, then the purposes and programs of vocational agricultural education should be planned and carried out with consideration for the needs of each individual who enrolls (Phipps, 1972). This means there must be diverse programs and methods within the system to meet the diversity of student needs and services.

Vocational agricultural education programs have expanded greatly within the past decade. Agriculture educators have tried to diversify program offerings to meet the needs of handicapped, disadvantaged, and culturally different youth.

Vocational Agricultural Education and Gifted Students

If vocational agriculture programs are to meet the needs of all students, their interests and their abilities, educators must endeavor to extend their programs to include the gifted and the talented. These are students with outstanding abilities who are capable of high performance. Their outstanding abilities are not necessarily limited to intellectual and academic excellence. These are students who may also possess high degrees

of ability in creative and/or productive thinking. Additionally, there are those possessed with superior mechanical abilities. Among all of these may be the potential leaders needed in the various occupational areas in agriculture.

Vocational agriculture has the potential of meeting the unique interests, needs and career goals of the gifted and the talented student. An individualized instructional format and the use of competency-based programs have already successfully met the needs of some of these students. However, to meet their needs fully, more enrichment opportunities and differentiated programs must be provided so that gifted students may enhance the fulfillment of their potential through vocational agriculture.

Need for the Study

As a traditionally people-oriented group, vocational agriculture educators have a responsibility to include gifted students who are interested in vocational agriculture. Vocational preparation of the gifted and talented could not be more timely. A new day has come for agriculture. On the domestic scene, the agriculture industry has become highly sophisticated and competitive. Farmers are living in an advanced technological period where change is not only accepted, but necessary to stay in business. The American farmer is making higher achievements every year and most of the world is looking to him/her to feed them or to show them how to feed themselves (Love and Howell, 1979). This means the agriculture industry will need highly intelligent and skilled personnel to meet this expanding demand for goods and services. One way to meet these demands is to attract gifted students to vocational agriculture.

In recent years, many gifted students have enrolled in vocational agriculture classes. Also, some states have mandated gifted programs. Special attention is needed to identify the gifted students, their problems, and their present status in order to maintain their interest and pursuit of agricultural careers. At present, there is a lack of information about current enrollment at both the state and the national levels. It is also not known what efforts are being made to assure that the potential of gifted and talented students is being challenged.

The findings of this research should be useful to school teachers, administrators, and researchers in the preparation of gifted students who are enrolled or who will enroll in vocational agriculture.

Statement of the Problem

The forgotten student on the American educational scene is the gifted and talented student interested in vocational education. In recent years, it has been reported that many gifted students have enrolled in vocational agriculture classes (Diehl, 1976; McMillion, 1976). Special attention is needed for gifted students, their problems, and their present status in order to maintain their interest and pursuit of vocational agriculture.

At present, there is a lack of information regarding the status of gifted students in vocational agriculture classes in the United States. It is not known what efforts are being made to assure that the potential of gifted and talented students is being challenged. Also, no one knows what has happened to gifted and talented vocational agriculture graduates (1974-1979) once they graduated.

The findings of this research should aid in the better preparation of present and future gifted and talented students and the future leaders of agriculture.

Objectives of the Investigation

The objectives of the investigation were:

1. To explore the current enrollment status of gifted students in vocational agriculture classes in the United States.
2. To identify the methods used by schools for identification of gifted students.
3. To explore the availability of curricular and co-curricular activities for gifted students in schools offering vocational agriculture.
4. To explore the availability of career awareness education to gifted students in schools offering vocational agriculture.
5. To examine the opinions and knowledge of the teachers and their administrators toward the gifted students and programs.
6. To identify the present status and employment histories of gifted students who graduated from high school vocational agriculture classes from 1974 to 1979.

PROCEDURE OF THE INVESTIGATION

Population and Sample of the Investigation

The population for this study consisted of all vocational agriculture teachers, their school administrators, and their graduated gifted students (1974-1979) who were enrolled in vocational agriculture in the continental United States. The sample included Pennsylvania agriculture teachers in all 224 departments of vocational agriculture and a random sample of 100 other vocational agriculture teachers in the United States, their school administrators (324), and the gifted students who had enrolled in vocational agriculture and graduated during 1974 to 1979.

Development of Survey Instrument

In the fall of 1979, the teacher and the administrator questionnaires were developed and field tested in 30 schools in Pennsylvania teaching vocational agriculture. Improvements were made to obtain vital information regarding the enrollments, identification procedures, curricular and co-curricular activities, and career awareness activities available to gifted students in general in the schools. The questionnaires also included the availability of curricular and co-curricular activities and career awareness activities to gifted students were were currently enrolled in vocational agriculture classes. The last part of the teacher and the administrator questionnaires consisted of test items designed to measure the attitude of the teachers and the administrators toward gifted students (Appendices A and B).

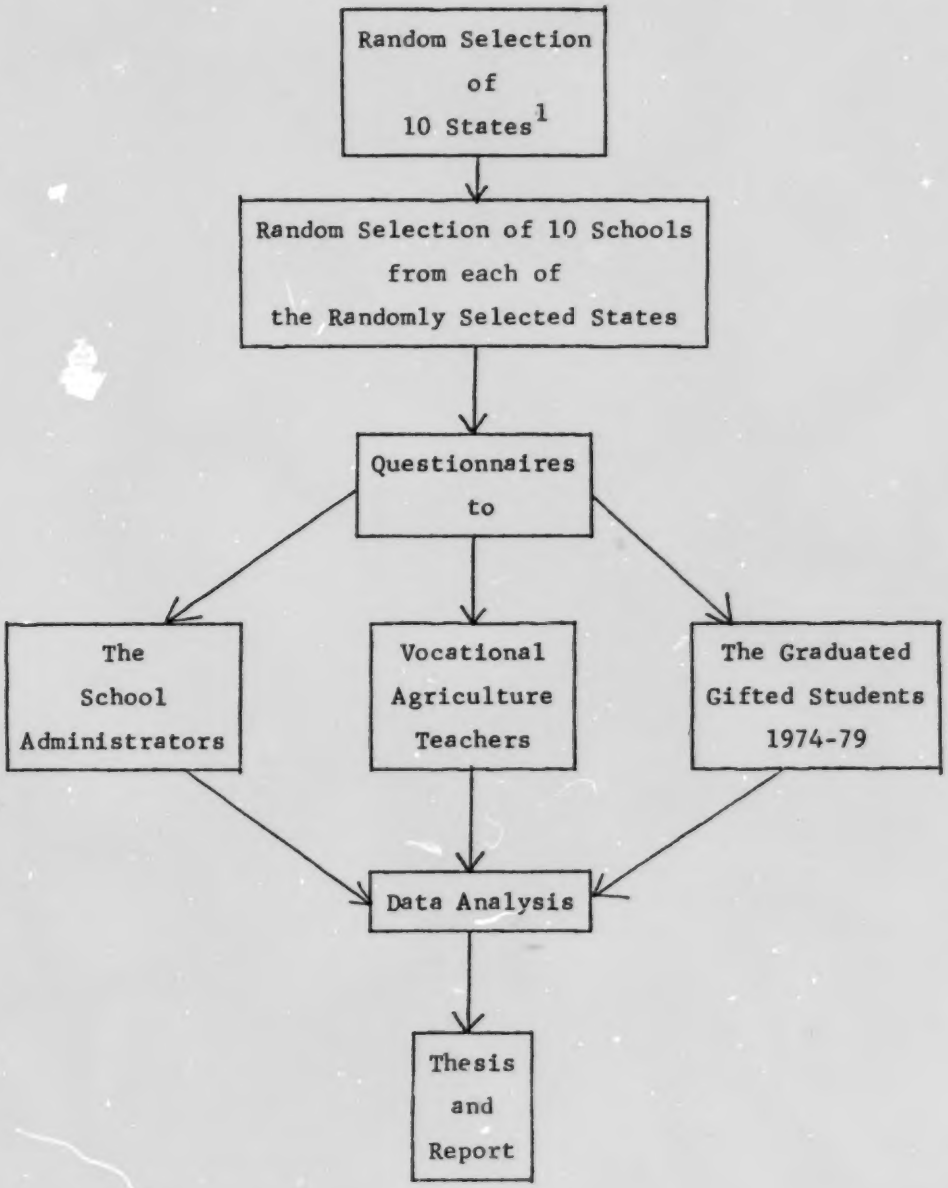
The third set of questionnaires was developed to survey gifted students who enrolled in vocational agriculture and graduated during 1974 to 1979 (Appendix C). The survey included their job histories from graduation until today and their attitudes toward vocational agriculture.

Before the survey was administered, approval was obtained for each survey instrument and the data collection procedure from the Protection of Human Subjects Committee, The Pennsylvania State University.

Survey Procedure

A flow chart of the survey procedure and data collection is given in Table 1.

Table 1. Flow Chart of Procedures.


Random Selection of 10 States[1]
Random Selection of 10 Schools from each of the Randomly Selected States
Questionnaires to
The School Administrators
Vocational Agriculture Teachers
The Graduated Gifted Students 1974-79
Data Analysis
Thesis and Report

[1]Excluding--Hawaii, Alaska and Pennsylvania (Pennsylvania was studied separately and all vocational agriculture teaching schools were included).

Selection of the States and Schools

All the states of the continental United States, excluding Pennsylvania, were numbered 1 to 47 after arranging them alphabetically. By using the random numbers table (Tuckman, 1972), ten states were selected for the sample. From each randomly selected state, ten schools offering vocational agriculture were selected by using the random numbers table. The 100 teachers, their administrators, and their graduated gifted students from these 100 randomly selected schools were used to represent the United States. The names and addresses of the gifted students were obtained from the teachers.

In Pennsylvania, all 224 schools teaching vocational agriculture were selected for the survey. Head vocational agriculture teachers in each of the schools, their administrators, and the gifted students who graduated during 1974 to 1979 with agriculture were used as a sampling unit.

Data Collection

Data were collected through mail and telephone surveys. In the spring of 1980, questionnaires, a cover letter, an informed consent form, an explanation of the study, and a stamped self-addressed envelope were mailed to each of the sampling units in the three populations, i.e., teachers, administrators, and the former students who are gifted (Appendices A, B, and C). Follow-up letters were mailed to non-respondents, first after two weeks, and second after a month. After one and a half months, a five percent random sample of non-respondents were telephoned and asked to respond. All the subjects involved were assured anonymity.

Consent Procedures and Guidelines for Safeguards

Informed consent forms (Appendices A, B, and C) describing the purpose and procedures of the study were mailed with the questionnaires. The subjects were advised in the informed consent form that their participation in the study was voluntary, and it was not necessary that they identify their name, position, and/or school. They were also informed that they were free not to answer specific items in the questionnaire and that their responses would be held strictly confidential.

All the subjects were requested to return the informed consent form with the questionnaire. In the case of teachers and administrators, any completed survey returned without a signed consent form was used as a survey returned with their consent since they were above 18 years of age. Any student survey returned from the student under 18 years of age without the consent form was not used as a part of the survey. The subjects were informed of the above procedures.

Data Analysis

Information from the completed questionnaires was transferred to data process cards for analysis. For the further anonymity of the subjects, responses were coded as to teacher, administrator, student, and state. Data were analyzed as a group, and no attempt was made to analyze individual responses.

General information data, such as school population, student enrollment in agriculture and gifted students in vocational agriculture, were analyzed by computer using descriptive statistics.

Items concerning identification, programming, and career awareness which the teacher and the administrator surveys had in common were analyzed using the chi-square technique. Total scores on the knowledge of information test for teachers and administrators were analyzed by using analysis of variance.

Information from the gifted students was analyzed by using descriptive statistics.

PRESENTATION OF DATA

By using random numbers, the following ten states were randomly selected for the survey: Alabama, California, Connecticut, Florida, Idaho, Indiana, North Carolina, Oklahoma, Utah, and Wisconsin. The eleventh state in this study was Pennsylvania. All the schools teaching vocational agriculture in Pennsylvania were included in the survey.

At present, fifteen states in the continental United States are mandating special education for gifted and talented students (Grossi, 1980). Pennsylvania is one of these mandating states.

This study included four states which are mandating the gifted programs. The states mandating such gifted programs included in this study were Alabama, Florida, North Carolina, and Pennsylvania. Excluding Pennsylvania, 33 percent of the states surveyed were mandating special education for gifted students.

The above data show that random selection of the ten states represented the remaining 47 states under the study. The population had 30 percent of the states mandating special education for gifted students (excluding Pennsylvania), while the sample had 33 percent of the states mandating special education for gifted students.

Questionnaires received before June 15, 1980 were included in the study. During the four months of data collection, 79 percent of the teachers and administrators responded to the survey. Percentages of surveys returned according to the states are given in Table 2. Five percent of the schools surveyed by phone reported that either they do not have gifted students in vocational agriculture or they have not identified the gifted students.

All vocational agriculture teachers in the survey were asked to name the subject matter areas included in their vocational agriculture curricula. A majority of the teachers in the United States reported having diversified programs while the majority of Pennsylvania teachers reported specialized curricular offerings. The vocational agriculture areas offered in 166 Pennsylvania schools and 62 of the United States schools are given in Table 3.

Current Enrollment Status of Gifted Students

Enrollment data of the student population in the surveyed schools are given in Table 2. Data were compiled from the surveys returned of 73 schools in the United States and 182 schools in Pennsylvania. Most of the schools in the states where gifted student programs are not mandated reported that they have some kind of special program for the bright students. Pennsylvania had a higher student population per school than

Table 2. Current Enrollment of Student Population in Surveyed Schools in Vocational Agriculture and Gifted Programs.

		Student Population in Schools	Gifted in Schools	Gifted in Vo.Ag.	Distribution of Gifted by Grade in Vo. Ag. 12	11	10	9	7-8	Vocational Agriculture Enrollment	Boys	Girls	Survey Return (%)
AL*	Total	6132	145	20	3	5	6	4	2	892	701	191	80
	Mean	766.5	18.1	2.5						111.5	87.6	23.9	
CA	Total	8195	412	25	3	2	9	11	0	382	278	104	70
	Mean	1170.7	58.8	3.6						54.6	14.9	39.7	
CT	Total	6593	191	13	1	5	4	3	0	739	455	284	70
	Mean	941.9	27.3	1.9						105.6	40.6	65.0	
FL*	Total	3982	91	19	8	2	7	2	0	1024	731	293	80
	Mean	497.8	11.4	2.4						128	91.4	36.6	
ID	Total	2808	57	18	0	5	7	6	0	445	420	25	60
	Mean	468	9.5	3.0						74.2	70	4.2	
IN	Total	7266	271	30	6	11	7	6	0	675	589	86	90
	Mean	807.3	30.1	3.3						75	65.4	9.6	
NC*	Total	6575	329	16	3	3	4	6	0	655	569	86	70
	Mean	939.3	47	2.3						93.6	81.3	12.8	

Table 2.. Continued.

		Student Population in Schools	Gifted in Schools	Gifted in Vo.Ag.	Distribution of Gifted by Grade in Vo. Ag. 12	11	10	9	7-8	Vocational Agriculture Enrollment	Boys	Girls	Survey Return (%)
OK	Total	3548	128	24	2	4	6	12	0	318	288	30	80
	Mean	443.5	16	3.0						39.5	36	3.8	
UT	Total	4368	223	11	1	3	3	4	0	345	328	17	60
	Mean	728	37.2	1.8						57.5	54.6	2.8	
WI	Total	3336	91	19	3	4	3	9	0	754	664	90	70
	Mean	476.6	13	2.2						107.7	94.9	12.9	
TOTAL U.S.	Total	52803	1938	195	30	44	56	63	2	6229	5023	1103	73
	Mean	723.3	26.5	2.7	.41	.60	.76	.86	--	85.3	68.8	15.1	
PA*	Total	157612	4284	176	38	46	42	50	--	12522	10931	1591	182 schools
	Mean	866	23.5	1.1	.20	.25	.23	.27	--	68.8	60.1	8.7	81.3

*States mandating gifted student programs.

Table 3. Areas of Vocational Agriculture Programs Surveyed Under the Study.

	Pennsylvania		United States	
	Number of Schools	Percent	Number of Schools	Percent
1. Agriculture production	73	44.0	15	24.2
2. Ornamental horticulture	29	17.5	10	16.1
3. Agricultural mechanics	9	5.4	0	0
4. Forestry	3	1.8	2	3.2
5. Agriculture product processing & marketing	0	0	3	4.8
6. Agriculture supply and service	0	0	0	0
7. Agricultural resources	0	0	0	0
8. All of the above	52	31.3	32	51.6
Total vocational agriculture departments surveyed	166		62	

the average United States school (866 vs. 723) in this study. In Pennsylvania 2.72 percent of the student population was in a gifted program, while the United States had 3.67 percent of the student population as gifted (Table 4).

Table 4. Percentage of Student Population in Gifted Programs.

	Total gifted in school (%)	Gifted in vocational agriculture (%)
Pennsylvania	2.7	0.1
United States	3.7	0.4

Enrollment of Gifted Students in Vocational Agriculture

The survey revealed that very few gifted students have enrolled in vocational agriculture (Table 4). Pennsylvania schools offering the vo. ag. curriculum had only 4 percent of its gifted students enrolled in vocational agriculture, compared to 10 percent for the United States. Also only 1.4 percent of the students enrolled in agriculture had been classified as gifted students (Table 2). In the United States 3.1 percent of the vocational agriculture population was gifted (Table 2). Enrollments of gifted students by grade level and sex are given in Table 5.

The percentage of gifted students that were female and enrolled in vocational agriculture in Pennsylvania and the United States was 12 and 18 percent respectively.

Table 5. Enrollment of Gifted Students in Vocational Agriculture by Grade Level and Sex.

Grade	Pennsylvania				United States			
	Males	Females	Total	Percent	Males	Females	Total	Percent
12	23	7	30	15	28	10	38	21
11	38	6	44	23	40	6	46	26
10	52	4	56	29	38	4	42	24
9	56	7	63	33	38	12	50	28
Elem.	0	0	0	0	2	0	2	1
Total	171	24	193	100	146	32	178	100

Past and Present Enrollment of Gifted Students in Vocational Agriculture

Teachers were asked to list the number of gifted students who had graduated from their departments during the last five years (1974-1979). According to their responses, 81 gifted students graduated during the period of 1974-1979 (Table 6). This total of 81 gifted students included 37 gifted students from Pennsylvania.

The turnover rate of teachers in this survey was about 17 percent in the last five years. Due to the above fact, the number of gifted students who graduated during 1974-1979 with vocational agriculture is probably slightly higher than the data given in Table 6 because the possibility exists that new teachers would be unable to identify students who had graduated before they were in the school.

Table 6. Past and Present Enrollment of Gifted Students in Vocational Agriculture.

	Graduated During 1974-1979	Present Enrollment	Change in the Percentage
Pennsylvania	37	176	475
United States	44	195	443
Total	81	371	458

Identification

In Pennsylvania a total of 182 administrators and 166 teachers responded to the mail survey; the total responses for administrators and teachers in the United States were 73 and 62, respectively. Since the respondents of this study were informed that they were free not to answer specific items in the questionnaire, several respondents did not answer certain questions in the questionnaire.

Identification Methods Used by Schools

The methods used by school districts to identify gifted students according to teachers and administrators are given in Table 7. Answers given by teachers and administrators were compared using the chi-square test.

Disagreements were found between teachers' and administrators' responses in both groups. More teachers (37 percent) in Pennsylvania reported use of an IQ test as the main criterion for identification in their schools, while 40 percent of the administrators reported the use of multiple criteria in identification of the gifted. Fifty-three percent of the United States teachers reported the use of IQ and teacher identification procedure, while only 34 percent of their administrators reported the same method reported by teachers.

Ninety-six percent of the vocational agriculture teachers in Pennsylvania reported that their schools involved teachers in the identification procedure. In the United States, 94 percent of the teachers reported the use of faculty members in the identification of gifted students. Even though a high percentage of the teachers reported that their schools are involving teachers in the identification procedure, only 6 out of 166 teachers in Pennsylvania and 7 out of 62 teachers in the United States reported of ever nominating students for identification.

Table 7. Methods Used to Identify Gifted Students in Pennsylvania and the United States as Reported by Teachers and Administrators (in percent).

Method	Pennsylvania[a]		United States[b]	
	Teacher[c] n=127	Administrator[d] n=145	Teacher[c] n=44	Administrator[d] n=57
IQ Test	37.5	26.2	9.4	14.3
Parental Identification	1.0	0	0	0
Teacher Identification	5.0	0	21.9	20.0
IQ and Teacher	32.5	32.7	53.1	34.3
All of the Above	21.5	40.2	9.4	31.4
Other Than Above Methods	2.5	0.9	6.3	0

[a]Significantly different answer between Pennsylvania teacher and administrator; probability 0.01, chi-square = 14.39.

[b]Significantly different answers between the United States teacher and administrator; probability 0.09, chi-square = 7.815.

[c]Significantly different answer between Pennsylvania and United States teachers; probability 0.001, chi-square = 31.38.

[d]Significantly different answer between Pennsylvania and United States administrators; probability 0.001, chi-square = 23.72.

Out of six teachers, five teachers had identified gifted students correctly. In the United States, only two out of seven teachers were successful in identifying the gifted. Thirteen students in Pennsylvania and two students in the United States were nominated by the teachers and selected for the gifted programs.

Qualification Requirements for Gifted Student Status

According to the data in Table 8, different schools had different criteria for qualification as a gifted student. In Pennsylvania, more than 50 percent of the respondents reported that their schools were using only an IQ score as a qualification criterion to the gifted program. There was no definite trend found for the qualification criteria in the United States (Table 8). There were no significant differences in data reported by teachers and administrators within Pennsylvania and the United States. However, significant differences were found between Pennsylvania teachers and administrators vs. the United States teachers and administrators.

Table 8. Qualification Requirements Reported by Teachers and Administrators (in percentage) for Gifted Student Status in Pennsylvania and United States Schools.

	Pennsylvania		United States	
	Teacher[a] n=134	Administrator[b] n=157	Teacher[a] n=54	Administrator[b] n=67
An IQ higher than 130	50.0	58.9	18.0	17.7
Creativity and talent	6.6	0.9	24.0	17.7
IQ, Creativity and Talent	19.7	22.4	6.0	11.8
Leadership	1.3	0	0	0
Creativity and Leadership	4.0	0.9	20.0	20.6
All of Above	13.2	11.2	20.0	17.7
Other Qualities	2.6	1.9	12.0	14.7
IQ and Other Qualities	2.6	3.7	0	0

[a]Significantly different answer between Pennsylvania and United States teachers; probability 0.001, chi-square = 43.42.

[b]Significantly different answer between Pennsylvania and United States administrators; probability 0.001, chi-square = 89.34.

Retesting for Identification

More than half of the teachers and administrators felt that borderline students who were not selected for the gifted students' program should be restested (Table 9). Fifty-one percent of those who favored retesting said that retesting should be done every year (Table 10). The main reason for a "no" answer to restesting was too much time required for such testing.

Table 9. Opinion of the Teachers and the Administrators About Retesting Borderline Students for Gifted Programs (in percent).

	Pennsylvania[a]		United States	
Retesting	Teachers n=84	Administrators n=106	Teachers n=31	Administrators n=33
Yes	53.6	59.4	51.6	63.6
No	15.5	26.4	22.6	18.2
Uncertain	31.0	14.2	25.8	18.2

[a]Significantly different answer between Pennsylvania teachers and administrators; probability 0.01, chi-square = 9.012.

Table 10. Opinion of the Teachers and the Administrators about how Often Borderline Students Should be Retested (in percent).

	Pennsylvania		United States	
Frequency of Retesting	Teachers n=45	Administrators n=63	Teachers n=16	Administrators n=21
Every year	54.9	50.0	45.5	50.0
Every 2 years	29.4	29.2	27.3	29.2
Every 3 years	4.2	12.5	4.6	8.3
As Needed	11.5	8.3	13.6	12.5

Forty-three percent of the teachers and 32 percent of the administrators in Pennsylvania thought that there is a need for a better identification procedure in their schools (Table 11). More than half of the teachers (65 percent) and administrators (51 percent) in the United States felt that there should be better identification procedures for gifted students. One-third of the total respondents in the United States and Pennsylvania thought that there are many gifted students in their schools who are not in the existing gifted programs (Table 12). More administrators than teachers felt that the identification procedures are good and there are not very many unidentified gifted students in their schools.

Table 11. The Teachers and Their Administrators' Opinions About the Need of Better Identification Procedures (in percent).

Need for Better Procedures	Pennsylvania[a]		United States	
	Teacher n=132	Administrator[b] n=149	Teacher n=43	Administrator[b] n=50
Yes	43.3	31.8	65.6	51.4
No	21.1	55.1	12.5	31.4
Uncertain	35.6	13.1	21.9	17.1

[a]Significantly different answer by teachers and administrators in Pennsylvania; probability 0.0001, chi-square = 26.63.

[b]Significantly different answer by Pennsylvania and United States administrators; probability 0.01, chi-square = 8.43.

In 89 percent of the United States schools, the teachers in the survey reported that the school administration does not provide a list of gifted students in their classes at the beginning of the school year. Eighty percent of the administrators in the United States schools agreed to the above fact reported by the teachers. In Pennsylvania 50 percent of the administrators said that the administrator does provide a list of gifted students to teachers, but only 35 percent of the teachers recalled receiving such a list.

Table 12. Opinion of the Teachers and Administrators About the Number of Unidentified Gifted Students in School (in percent).

Number of Unidentified Gifted	Pennsylvania[a]		United States[b]	
	Teacher n=137	Administrator n=146	Teacher n=42	Administrator n=50
Many	37.2	29.0	34.4	43.3
Few	43.0	65.4	31.3	53.3
Uncertain	19.8	5.6	34.4	3.3

[a]Significantly different answer by teachers and administrators in Pennsylvania; probability 0.0013, chi-square = 13.327.

[b]Significantly different answer by teachers and administrators in the United States; probability 0.0073, chi-square = 9.83.

Unidentified Gifted and Talented Students in Vocational Agriculture

Sixty-three percent of the vocational agriculture teachers in Pennsylvania schools reported that they have gifted students who can qualify as gifted according to the definition by the United States Department of Education, but who are not included in the gifted program. Seventy-five percent of the United States teachers in the survey reported that their departments have unidentified gifted students. Table 13 shows the number of students whom teachers thought can be qualified as gifted in selected areas of vocational agriculture. According to the teachers, 2 percent of the vocational agriculture student population can qualify as gifted if the definition of giftedness by the U. S. Department of Education is used.

Table 13. The Number of Vocational Agriculture Students Who Can Qualify as Gifted According to the Definition of Giftedness by the U. S. Department of Education but not Presently Enrolled in Gifted Programs Reported by the Teachers.

Area of Giftedness	Sample		Population[a] Estimate
	Pennsylvania	United States	
Leadership	88	49	5,593
Shop	97	44	5,040
Creativity	45	26	2,966
Other Area(s)	18	3	355
Total	248	122	13,954
Percent of Enrollment	2.0	2.0	2.0

[a]Estimated population includes all the states of the continental United States.

Programming (Curricular and Co-Curricular Activities)

The third objective of this investigation was to explore the availability of curricular and co-curricular activities for gifted students in schools offering vocational agriculture. Responses given by teachers and administrators to the items were compared by using the chi-square test.

Teaching Procedures

Teachers of vocational agriculture were asked to name the teaching procedures they use to teach gifted students in their vocational agriculture classes. Information about the teaching procedures used by the other teachers in the schools was provided by the administrators. Data in Table 14 show that special group teaching and giving special attention and special activities to gifted students are the most widely used teaching procedures among teachers, including vocational agriculture teachers. A large number of vocational agriculture teachers in Pennsylvania (43 percent) reported there was no difference in teaching procedures for gifted from the rest of the students in their classes.

Table 14. Teaching Procedures Used to Teach Gifted Students in Vocational Agriculture Classes and Other Classes as Reported by Vocational Agriculture Teachers and Their Administrators (in percent).

Teaching Procedure	Pennsylvania[a]		United States[b]	
	Vo. Ag. Classes n=80	Other Classes n=140	Vo. Ag. Classes n=29	Other Classes n=39
Special Group Teaching	3.1	13.5	6.9	6.3
Special Attention and Activities	32.3	28.8	55.2	18.8
Both of Above	21.5	44.2	17.2	46.9
No Difference in Teaching	43.1	13.5	20.7	28.1

[a]Significantly different responses between Pennsylvania teachers and administrators; probability 0.0005, chi-square = 27.71.

Curricular Activities

Teachers and administrators were asked to name the curricular activities used by their schools to teach gifted students. More than 50 percent of the teachers and the administrators reported that their schools are using individualized instruction or acceleration or both activities to teach gifted students (Table 15).

Community Involvement for Enrichment

The data in Table 16 shows that vocational agriculture teachers are having less of the special community and/or parent involvement activities than the other teachers in school systems for the enrichment of their gifted students. Significantly fewer special field trips were planned by Pennsylvania's vocational agriculture teachers than the other teachers in their schools and in the United States vocational agriculture classes (Table 17).

Only 20 percent of the teachers and 27 percent of the administrators in Pennsylvania reported that they provide special extra-curricular activities for gifted students. More teachers (48 percent) and administrators (39 percent) in the United States than in Pennsylvania reported that they provide special extra-curricular activities for gifted students. The majority of the administrators reported that the instruction of gifted

Table 15. Curricular Activities Used by Schools to Teach Gifted Students as Reported by Teachers and Their Administrators (responses in percentage).

Curricular Activities	Pennsylvania[a] Teacher n=86	Pennsylvania[a] Administrator n=140	United States Teacher n=27	United States Administrator n=45
Individualized Instruction	27.8	10.8	15.4	16.7
Acceleration	15.3	10.8	19.2	13.3
Both of the Above	20.8	14.7	15.4	23.3
Grade-Skipping	1.4	1.0	0	0
Teaching Entirely Different Things	1.4	2.0	3.9	0
Other Activities	9.7	3.9	7.7	10.0
All of the Above	23.6	56.9	38.5	36.7

[a]Significantly different answer by Pennsylvania teachers and administrators; probability 0.001, chi-square = 29.97.

Table 16. Use of Special Community and/or Parental Involvement Activities for the Enrichment of Gifted Students (responses in percent).

	Pennsylvania[a] Teacher n=151	Pennsylvania[a] Administrator n=146	United States[b] Teacher n=53	United States[b] Administrator n=57
Yes	32.1	58.9	24.2	43.2
No	55.1	38.3	57.6	51.4
Uncertain	12.8	2.8	18.2	5.4

[a]Significantly different answer by Pennsylvania teachers and administrators; probability 0.0003, chi-square = 16.07.

[b]Significantly different answer by the United States teachers; probability 0.01, chi-square = 4.45.

Table 17. Arrangement of Special Field Trips for Gifted Students in Vocational Agriculture and Other Classes (responses in percentage).

	Pennsylvania[a]		United States	
	Teacher[b] n=117	Administrator n=137	Teacher[b] n=56	Administrator n=59
Yes	13.0	57.0	36.4	46.0
No	77.9	38.3	63.6	48.7
Uncertain	9.1	4.7	0	5.4

[a]Significantly different answer by Pennsylvania teachers and administrators; probability 0.0001, chi-square = 36.62.

[b]Significantly different answer by Pennsylvania and United States teachers; probability 0.01, chi-square = 12.75.

students in their schools is directed toward their college preparation. A higher percentage of the United States teachers (71 percent), compared to Pennsylvania's teachers (46 percent), agreed that they do prepare gifted students for college (Table 18).

Table 18. The Instruction or Direction of the Gifted Students in Vocational Agriculture Classes and in Schools. Responses by Teachers and Administrators in Percentage.

	Pennsylvania[a]		United States	
Instruction	Teacher[b] n=177	Administrator n=137	Teacher[b] n=56	Administrator n=59
For College	45.6	61.7	71.0	70.6
Not For College	27.9	22.4	12.9	11.8
Uncertain	26.5	15.9	16.1	17.7

[a]Significant difference in responses between Pennsylvania teachers and administrators; probability 0.09, chi-square = 4.79.

[b]Significant difference in responses between Pennsylvania and United States teachers; probability 0.01, chi-square = 10.59.

The breakdown of teacher responses regarding the direction of curriculum in their classes for the gifted students is given in Table 19. The leading direction of curricula for gifted in Pennsylvania was agricultural occupations while in the United States it was reported according to individual need.

Table 19. The Direction of Curricula Available to the Gifted Students in Vocational Agriculture Classes (responses in percentage).

Curriculum Directed Toward:	Pennsylvania[a] n=129	United States[a] n=57
Agricultural Occupation	38	21
College Preparation	14	18
General Education	11	12
According to Individual Need	22	45
Uncertain	15	4

[a]Significant difference in responses between Pennsylvania and United States teachers; probability .01, chi-square = 15.92.

Career Awareness

One of the objectives of this study was to assess the availability of career awareness programs or activities to gifted students in vocational agriculture classes. Career activities provided by other teachers were reported by administrators. A majority of the school administrators in Pennsylvania reported that their schools have career awareness programs for all gifted students. Seventy-four percent of the Pennsylvania schools had career awareness programs for all gifted students. Compared to Pennsylvania (74 percent), fewer schools in the United States (53 percent) had career awareness programs.

Forty-nine percent of the Pennsylvania teachers and 53 percent of United States teachers reported that they offer some sort of career awareness programs to all students before they enter vocational agriculture. However, very few vocational agriculture teachers from Pennsylvania (15 percent) and the United States (24 percent) reported that their departments have career awareness programs to attract gifted students to the program.

Twenty-six percent of the teachers in Pennsylvania and 47 percent of the teachers in the United States do make special efforts, such as visiting students individually, contacting parents, and farm visits to attract gifted students to their classes.

A high percentage of teachers in Pennsylvania (69 percent) and the United States (82 percent) expressed the opinion that their schools encourage gifted students to enter a college-bound curriculum rather than vocational agriculture. The majority of administrators reported differently from the opinion expressed by teachers (Table 20).

Table 20. Opinion of Vocational Agriculture Teachers and Their Administrators About Their School Favoring Gifted Students to Enter a College-bound Curriculum Rather than Vocational Agriculture (responses in percentage).

	Pennsylvania[a]		United States[b]	
	Teacher n=157	Administrator n=164	Teacher n=59	Administrator n=62
Favor College-bound Curriculum Rather Than Vo. Ag.	69.3	35.5	82.3	44.4
Does Not Favor College-bound Curriculum Over Vo. Ag.	20.5	57.9	14.7	47.2
Uncertain	10.2	6.5	2.9	8.3

[a]Significant difference in responses between Pennsylvania teachers and administrators; probability 0.0001, chi-square = 28.21.

[b]Significant difference in responses between the United States teachers and administrators; probability 0.004, chi-square = 10.77.

Vocational Agriculture and Gifted Students

A very high percentage of the teachers and the administrators in the survey agreed that vocational agriculture can be very useful in the enrichment of gifted students (Table 21). Most of the teachers in Pennsylvania (87 percent) and the United States (91 percent) believed that there is a great deal of opportunity for gifted students in vocational agriculture. A considerably lower percentage of administrators in Pennsylvania (54 percent) compared to the United States school administrators (82 percent) believed that there is much opportunity for gifted students in vocational agriculture.

Table 21. Opinions of the Vocational Agriculture Teachers and Administrators About the Usefulness of Vocational Agriculture in the Enrichment of Gifted Students (in percent).

Vo. Ag. for Enrichment of the Gifted	Pennsylvania		United States[a]	
	Teachers n=152	Administrators n=157	Teachers n=59	Administrators n=56
Very Useful	87.4	70.6	100.0	82.1
Not Useful	1.2	4.6	0	0
Uncertain	11.5	24.8	0	0

[a]Significant difference in responses between the United States teachers and administrators; probability 0.05, chi-square = 6.75.

A high percentage of both the Pennsylvania teachers and the United States teachers felt that there is a need for more information on how to attract gifted students to vocational agriculture (Table 22).

Also, a large percentage of the teachers and administrators in both Pennsylvania and the United States felt there is a need for more information on how to teach gifted students in vocational agriculture. In both groups, the difference in the teachers' and the administrators' responses was statistically nonsignificant (Table 23).

Table 22. Opinions of the Vocational Agriculture Teachers (in percentage) About the Need for More Information on how to Attract Gifted Students to Vocational Agriculture.

More Information Needed to Attract Gifted to Vo. Ag.	Pennsylvania n=149	United States n=54
Yes	75.3	91.2
No	11.2	5.9
Uncertain	13.5	2.9

Table 23. Vocational Agriculture Teachers' and Administrators' Opinions About the Need for More Information on how to Teach Gifted Students in Vocational Agriculture.

Need for More Information on how to Teach Gifted	Pennsylvania		United States	
	Teachers[a] n=149	Administrators n=157	Teachers[a] n=54	Administrators n=56
Yes	70.8	67.6	85.3	82.1
No	10.1	18.5	11.8	10.3
Uncertain	19.1	13.9	2.9	7.7

[a]Significant difference in responses between Pennsylvania and United States teachers; probability 0.02, chi-square = 9.09.

Special Counseling

The majority of the United States teachers and administrators responded that there should be special counseling of the gifted students who have enrolled in vocational agriculture, while 46 percent of the administrators and 55 percent of the Pennsylvania teachers felt that there should be special counseling of the gifted students (Table 24). Seventy-four percent of the Pennsylvania teachers and 76 percent of the United States teachers reported that their department does teach career decision making skills as part of the curriculum and counseling and that includes gifted students. The majority of the teachers who said "no" to the special counseling felt that counseling should be left to the teachers.

Table 24. Opinion of Vocational Agriculture Teachers and Administrators About Special Counseling of the Gifted Students who Have Enrolled in Vocational Agriculture (responses in percentage).

Need for Special Counseling	Pennsylvania		United States	
	Teacher n=134	Administrator n=149	Teacher n=48	Administrator n=55
Yes	55.2	45.8	58.8	57.9
No	28.7	38.3	26.5	31.9
Uncertain	16.1	15.9	14.7	10.5

A need for more flexible vocational agriculture programs for gifted students than for other students was expressed by a majority of the teachers and the administrators in both groups. They also expressed the opinion that vocational agriculture programs for gifted students should be more directed toward career exploration and preparation (Table 25).

Number of Gifted Students who Dropped Vocational Agriculture

Fourteen vocational agriculture teachers in the United States reported that 43 gifted students were enrolled in the vocational agriculture program and then dropped the program in the last five years. The drop-out number in Pennsylvania was 34 students in 15 schools. The two main reasons given for dropping out of vocational agriculture were difficulties in scheduling (wanted to attend for less time than other students) and the feeling that vocational agriculture was not challenging.

Table 25. Opinion of Vocational Agriculture Teachers and Administrators About Flexible Vocational Agriculture Programs for the Gifted (responses in percentage).

Need for Flexible Program	Pennsylvania		United States	
	Teacher n=134	Administrator n=162	Teacher n=49	Administrator n=51
Yes	57.0	55.6	61.8	55.3
No	25.6	25.9	26.5	23.7
Uncertain	17.4	18.5	11.8	21.1

Knowledge of Information and Attitude of the Teachers and Administrators Toward Gifted Students

The data from Table 26 shows that the mean information and attitude scores of the teachers and administrators at the state and the national level were nonsignificantly different. According to the knowledge of information test (Jacobs, 1972) concerning the gifted, the mean scores for all the responding groups were at the lower end of the positive scale. This means the respondents did not hold a high perception toward gifted students.

Table 26. Mean Attitude Scores of the Teachers and Administrators Toward Gifted Students.

	Pennsylvania		United States	
	Teachers	Administrators	Teachers	Administrators
Mean Score[a]	6.1	6.1	6.0	6.3
S.D.	1.6	1.5	1.5	1.5

[a]6-10 indicates positive attitude; 1-5 indicates negative attitude.

A majority of the respondents showed a negative attitude toward gifted items 1, 4, 6, 8 and 14. Keys to the test items are reported in Appendix B as footnote after Section V of the teacher questionnaire.

Present Status of Gifted Vocational Agriculture Graduates

The teachers were asked to name gifted students who had been in vocational agriculture and who graduated from high school from 1974 to 1979. According to the survey, 37 gifted vocational agriculture students in Pennsylvania and 44 gifted vocational agriculture students in the United States were graduated during the five year period. The teachers were also asked to give addresses and present occupations of the gifted students. Addresses were provided for 54 of the above students. Distinction between the Pennsylvania and the United States graduates is not made because of the low number of students for comparative statistics. Present occupations of the gifted students are given in Table 27.

Table 27. Present Occupations of Gifted Vocational Agriculture Students who Graduated During 1974 to 1979. Data provided by teachers.

Occupation	Number	Percent
Student	42*	52
Farming	21	26
Mechanics and Factory Workers	7	9
Salesman	5	6
Armed Forces	5	6
Waitress	1	1
Total	81	100

*14 graduates are working toward degrees in engineering and medical fields.

Questionnaires were sent to the 54 graduated students for whom addresses were obtained. A total of 26 questionnaires were returned after two reminders. Three questionnaires were returned undelivered by the post office because of incomplete addresses. Data in Table 28 show that the occupational change rate for the surveyed group is only 1.37 per graduate. The occupational change rate does not include summer jobs held while attending college. Three graduates out of 26 reported that at present they are not working in agriculture or agriculturally-related occupations.

Table 28. Year of Graduation and Average Number of Occupations Held by Gifted Vocational Agriculture Graduates.

Year of Graduation	Total Graduated[a]	Average Number of Occupations Held Since Graduation
1979	10	1.3
1978	3	1.0
1977	4	1.0
1976	4	1.0
1975	2	1.0
1974	0	0
1973	2	3.0
1972	1	1.0

[a]15 attended or attending college.

Feelings About Present Occupation and Preparation in Vocational Agriculture

Nineteen graduates (73 percent) responded that they are satisfied with their present occupation. Four graduates reported being dissatisfied with their present occupation, and three graduates were uncertain. All the graduates who reported dissatisfaction or uncertainty had not received any higher education after graduation.

Sixty-two percent (16 graduates out of 26) of the graduates felt that their preparation in vocational agriculture was adequate for their occupation(s) (Table 29). Three of the ten graduates who had felt that their preparation was inadequate or those who were uncertain about their preparation also reported that their present occupations are not related to vocational agriculture. Six graduates from the "no" and "uncertain" group felt that their education in vocational agriculture was too general and not challenging, and they felt the need for more business and math education. Several thought the teacher taught only public relations and was too weak in technical preparation. Six of the ten who did not feel that their preparation in vocational agriculture was adequate also were the ones who were dissatisfied with their present occupation.

Table 29. Feelings of the Gifted Graduates About the Adequacy of Preparation in Vocational Agriculture for their Occupation(s).

Feeling About Preparation in Vocational Agriculture	Number	Percent
Adequate	16	61
Inadequate	8	31
Uncertain	2	8
Total	26	100

Strongest Points of Vocational Agriculture Programs

FFA activities and the fact that one can pursue his/her own interests in agriculture were the main reasons given by the graduates as the strongest points of the vocational agriculture program. Individualized instruction, teachers, shop and other skills were also reported by the gifted as strong points (Table 30).

Nineteen responses from gifted vocational agriculture graduates reported "themself" to the question, who influenced you to enroll in vocational agriculture. Guidance counselors ranked last in influencing students to enroll in vocational agriculture programs (Table 31).

Table 30. Strongest Points of Vocational Agriculture Programs.

Strong Points	Number[a]	Percent
FFA Activities	12	46
Pursue Own Interest in Agriculture	10	38
Individualized Instruction and Teacher	6	23
Shop and Other Skills	6	23

[a]Total responses are more than 26 because many students gave more than one response.

Table 31. Influence of Different People on Gifted Vocational Agriculture Graduates to Enroll in Vocational Agriculture.

Different Persons	Number[a]	Percent
Yourself	19	73
Agriculture Teacher	6	23
Parents	5	19
Fellow Students	4	15
Others	3	11
Guidance Counselor	1	4

[a]Total responses are more than 26 because of multiple responses.

Feelings About Vocational Agriculture Programs

All the gifted graduates responded that if they could start over again, they would still enroll in vocational agriculture (Table 32). This included the graduates who expressed the opinion that their preparation was inadequate. However, when the gifted graduates were asked if they would advise other gifted students to enroll in vocational agriculture, five responded as being uncertain (Table 32). It is interesting to note that all five graduates who were uncertain about advising the gifted to enroll in vocational agriculture also did not have any higher education and were dissatisfied with their present occupation.

Table 32. Feeling of Gifted Vocational Agriculture Graduates about Re-enrollment in Vocational Agriculture and Advising Gifted Students to Enroll in Vocational Agriculture.

Responses	Re-enrollment in Vo. Ag.	Advising Gifted to Enroll in Vo. Ag.
Yes	26	20
No	0	0
Uncertain	0	5[a]

[a]All five were dissatisfied with their present occupation and did not receive any higher education.

Special Instruction

Eleven graduates reported receiving special instruction in high school vocational agriculture. Also all eleven who received special instruction opted for and attended higher education. Twelve graduates reported not receiving special instruction, and three were uncertain as to whether or not special instruction had been tendered. All the graduates who were dissatisfied with their present occupation and had not received higher education were the ones who did not receive any special instruction as a gifted student in high school vocational agriculture classes or were uncertain of whether they had received special instruction.

FFA Club Leadership and the Gifted Students

Twenty-three of 26 responses of gifted students held office in FFA (Future Farmers of America) Club during their school years. Only three graduates reported not holding office in the FFA. This means 88 percent of the gifted graduates received some leadership training during their school years through vocational agriculture.

MAJOR FINDINGS OF THE INVESTIGATION

Major findings are discussed according to the objectives of this study.

Objective 1. Enrollment Status of Gifted Students in Vocational Agriculture.

At present, based on survey data, there are an estimated 22,100 identified and 14,000 unidentified gifted students in schools offering vocational agriculture who possess the special talents mentioned in the United States Department of Education's definition of giftedness enrolled in the continental United States. In the last five years, enrollment of gifted students in vocational agriculture has increased four fold in both Pennsylvania and the United States. However, these gifted students still represent a very small percentage of the total gifted student population in those schools. The United States schools have a higher percentage of gifted students enrolled in vocational agriculture than does Pennsylvania.

Objective 2. Methods Used by Schools for the Identification of Gifted

IQ tests and/or nomination by teachers are the most widely used methods in schools for the identification of gifted. Very few vocational agriculture teachers have ever taken an active part in the identification process even though the majority of the schools reported involving teachers in the identification procedures. A high percentage of teachers and administrators expressed the need for better identification because of the inefficiency of the present methods to identify all gifted students. The majority of the respondents felt that borderline students should be retested.

A need for better communication was felt between the teachers and administrators, in order to provide better education for the gifted. A very high percentage of vocational agriculture teachers in both Pennsylvania and the United States reported not receiving the list of names of gifted students from the administration.

Objective 3. Availability of Curricular and Co-Curricular Activities

Individualized instruction and acceleration are the major curricular activities used in schools by all teachers including vocational agriculture teachers. Community involvement and field trips for gifted students are used more by other teachers compared to vocational agriculture teachers.

A majority of the respondents reported that instruction of the gifted in their classes or schools is directed toward college preparation. Many vocational agriculture teachers in both Pennsylvania and the United States have a curriculum based on the individual's needs. The need for information on how to teach gifted students in vocational agriculture was expressed by all respondents in the survey.

Objective 4. Availability of Career Awareness Education

Very few vocational agriculture teachers are involved in career awareness programs for the prospective gifted students before they enroll in vocational agriculture. Most of the teachers felt the necessity for information on how to attract gifted students to vocational agriculture. Three-fourths of the vocational agriculture teachers reported teaching career decision-making skills to all students in their classes. A need for a flexible program and special counseling of the gifted was reported by the respondents. Inflexible program scheduling was one of the main reasons reported by the teachers for the high drop-out rate of gifted students from vocational agriculture.

Objective 5. Attitude of the Teachers and the Administrators Toward the Gifted

The success of any educational program depends upon the administrators and teachers. This study revealed that very few teachers and administrators had high degree of knowledge of gifted students and high positive attitude toward gifted students and gifted programs.

To make the education of the gifted more successful and effective, the teachers and administrators should change their attitudes. This can be done by providing information regarding gifted students, their ability, and their problems, to the teachers and administrators.

Objective 6. Present Status of Gifted Vocational Agriculture Graduates

Vocational agriculture teachers and special instruction received during the high school years were found to be key factors in achieving satisfaction in gifted students' present occupations. Ones who received a special education and attention from teachers aspired to receive higher education, and were found to be happier than the others.

The survey revealed that a large percentage of gifted vocational agriculture graduates have not attended institutions of higher learning. According to the graduates, FFA was sited as the strongest point in their preparation.

Conclusions From the Study

The trend of gifted students' enrollment in vocational agriculture in recent years is on the increase. The enrollment in the last five years has increased four fold in vocational agriculture. According to the educators, vocational agriculture can play a valuable role in the enrichment of all gifted students. To keep this trend on the increase, vocational agriculture teachers and their programs need to adapt to the changing needs of gifted students.

Vocational agriculture teachers should take an active part in all facets of gifted students' activities, such as identification, instruction, and counseling. The teachers should be trained to utilize the untapped community and social resources which are easily accessible to vocational agriculture. More information should be provided to the teachers on how to attract gifted students to vocational agriculture. According to the gifted graduates, the success of the program depends upon the teacher. The teachers should be made aware of this fact, in order that they may be better able to provide special instruction and attention to their gifted students.

According to most of the respondents, vocational agriculture can better serve the gifted students by providing flexible and challenging programs. Such programs could help slow down the drop-out rate of gifted students from vocational agriculture. Flexible programming will also allow gifted students to prepare themselves with the courses needed for higher education.

Recommendations

1. Similar studies should be conducted for each state in the United States.

2. Longitudinal studies should be conducted for job histories of the gifted graduates.

3. Parallel studies should be conducted in the other areas of vocational education.

4. Information should be collected, tested, and disseminated to the teachers on how to attract and teach gifted students in vocational agriculture.

5. Curriculum materials should be developed for gifted students in vocational agriculture.

6. Preservice and inservice classes should be conducted for the teachers on how to teach the gifted in vocational agriculture.

BIBLIOGRAPHY

Diehl, I. W. "Attracting the Talented Students," Agricultural Education, Vol. 49, No. 2, August 1976.

Grossi, A. John. Personal letter, The Council for Exceptional Children, Reston, Virginia, June 1980.

Jacobs, Jan C. "Teacher Attitude Toward Gifted Children," The Gifted Child Quarterly, Spring 1972, pp. 23-26.

Love, Gene M. "An Introduction to the Philosophy of Agriculture Education," The Journal of the American Association of Teacher Educators in Agriculture, Vol. 19, No. 1, March 1978.

Love, Gene M. and Howell, David L. "International Agriculture Education Assistance: Can it be Justified?" Pennsylvania Agricultural Education, Vol. 58, No. 7, March 1979.

McMillion, Martin B. "High School Agriculture for the Advantaged," Agricultural Education Magazine, Vol. 49, No. 2, 1976, p. 27.

Phipps, Lloyd J. Handbook on Agricultural Education in Public Schools. The Interstate Printers and Publishers, Inc., IL, 1972.

APPENDIX A

QUESTIONNAIRE FOR VOCATIONAL AGRICULTURE TEACHERS

THE PENNSYLVANIA STATE UNIVERSITY
102 ARMSBY BUILDING
UNIVERSITY PARK, PENNSYLVANIA 16802

College of Agriculture
Department of Agricultural Education

Area Code 814
863-0443

February 20, 1980

Dear Vocational Agriculture Teacher:

Your help is urgently needed.

The Department of Agricultural Education, the Pennsylvania State University, is undertaking a study with a national stratified sample of vocational agriculture teachers and their administrators aimed at assessing the status of gifted and talented students in vocational agriculture classes. At present, no one knows how many gifted students are enrolled in vocational agriculture classes or how teachers respond to such students. Your response to the enclosed survey will be helpful to school administrators, school teachers, researchers, and students, in the preparation of future leaders of agriculture. The definition of gifted students is given on the next page for your information.

I am requesting that you complete the enclosed questionnaire and return the form using the enclosed, self-addressed envelope.

Thank you for this very important contribution. You may be assured that after the data are transferred to computer cards, this questionnaire will be destroyed and your anonymity is guaranteed.

Sincerely,

Himanshu Pandya

HIMANSHU PANDYA
Graduate Student

HP/amk

Enclosures: (2)

Samuel M. Curtis

DR. SAMUEL M. CURTIS
Professor of Agricultural
Education, Thesis Advisor

AN EQUAL OPPORTUNITY UNIVERSITY

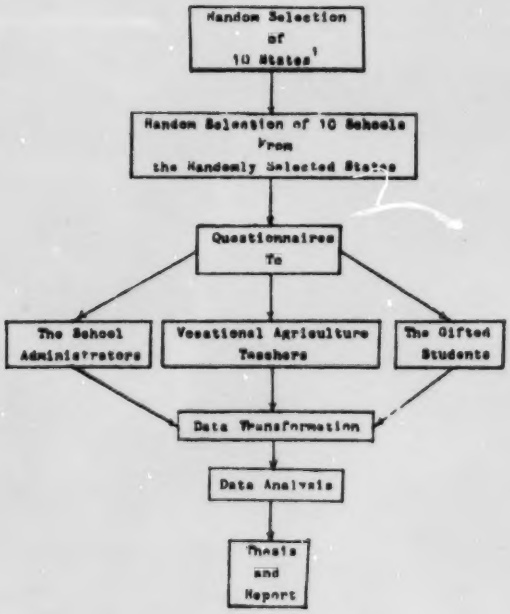
Definition - Gifted and Talented Student

Gifted and talented children are those who, by virtue of outstanding capabilities, are capable of high performance. These include those who have demonstrated any of the following abilities or aptitudes, singly or in combination:

1. General intellectual ability
2. Specific academic aptitude
3. Creative or productive thinking
4. Leadership ability
5. Visual and performing art aptitude
6. Psychomotor ability.

(U. S. Office of Education)

Flow-Chart of the Procedure



[1]Excluding - Hawaii, Alaska, and Pennsylvania (Pennsylvania will be sampled separately and all schools teaching vocational agriculture will be included).

INFORMED CONSENT FORM

The Pennsylvania State University

Title of Investigation: Status of Gifted Students in Vocational Agriculture Classes in the United States

Investigator(s): Mr. Himanshu Pandya, Dr. S. M. Curtis

Date: April 15, 1980

This is to certify that I, _____, hereby (give permission to have my child) agree to participate as a volunteer in a scientific investigation (experiment, program, study) as an authorized part of the education and research program of The Pennsylvania State University under the supervision of Mr. Pandya. The purpose and procedures of this study are explained on the back of the form.

I understand that I am free to deny any answer to specific items or questions in interviews or questionnaires.

I further understand that I am free to withdraw my consent and terminate my participation at any time.

Date	Date of Birth	Subject's Signature

I, the undersigned, have defined and fully explained the investigation to the above subject.

Date	Investigator's Signature

Purpose of the Study

The forgotten student on the American educational scene is the gifted and talented student interested in vocational education. A pilot study revealed that 40 to 50 percent of the vocational agricultural departments in Pennsylvania have gifted student(s) in their program. At present, there is a lack of information regarding the status of gifted students in vocational agricultural classes in the United States. It is not known what efforts are being made to assure that the potential of gifted and talented students is being challenged. The purpose of this study is to collect information regarding the present status including the areas of: identification, curricular and co-curricular activities, and career awareness for gifted and talented students in vocational agriculture.

This research survey will be useful to agriculture teachers, administrators, researchers who plan programs, and to students, in the better preparation of future leaders of agriculture.

Procedure of the Study

The sample for this study consists of all Pennsylvania agriculture departments and a random sample of 100 other vocational agriculture teachers in the United States, their school administrators, and the gifted students who had enrolled in vocational agriculture and who graduated during 1974 to 1979 (also see the attached page with the questionnaire for more procedural information).

Information from the completed questionnaires will be transferred to data-process cards for analysis. Once the data are analyzed, the questionnaire will be destroyed to protect your anonymity.

TEACHER'S SURVEY OF GIFTED AND TALENTED STUDENTS IN HIGH SCHOOL VOCATIONAL AGRICULTURE

TEACHER'S NAME:_____

SCHOOL:_____

(It is not necessary that you identify your name and school; however, it would be helpful in the event we need to contact you again. The number in the right hand corner is for computer identification and data analysis only.)

Part I: General Information

1. Number of gifted students enrolled in the program at present:

	Males	Females
12th grade	_____	_____
11th grade	_____	_____
10th grade	_____	_____
9th grade	_____	_____
Junior High and Elementary Vocational Agriculture	_____	_____
TOTAL ENROLLMENT IN VOCATIONAL AGRICULTURE	_____	_____

2. Please give names and current addresses of gifted students (is possible) who graduated from Vocational Agriculture from June 1974 to June 1979. If possible, also include the occupations of these students from graduation until today. (Please use an additional page, if necessary.)

a. NAME:_____ ADDRESS:_____

_____

OCCUPATIONS: (1st Job)_____

(2nd Job)_____

(3rd Job)_____

b. NAME:_____ ADDRESS:_____

_____

OCCUPATIONS: (1st Job)_____

(2nd Job)_____

(3rd Job)_____

Part I: General
Information
(Continued)
Page 2

c. NAME:_____ ADDRESS:_____

_____

OCCUPATIONS: (1st Job)_____

(2nd Job)_____

(3rd Job)_____

d. NAME:_____ ADDRESS:_____

_____

OCCUPATIONS: (1st Job)_____

(2nd Job)_____

(3rd Job)_____

Part II: Identification

Please circle one or more responses for each item.

3. This school district uses one or more of the following method(s) for the identification of gifted students:

   a. IQ tests
   b. Parental identification
   c. Teachers' identification
   d. Other (please specify)_____

4. Have you ever nominated students for the gifted student program?

   a. Yes
   b. No
   c. If yes, give the number of students selected in the gifted programs_____.

5. To qualify for gifted student status in this school, a student must have:

   a. An IQ higher than 130
   b. Creativity and talent in some area of study
   c. High leadership ability
   d. Other qualities (please specify)_____

6. Do you feel that borderline students who were not selected for the gifted students' program should be retested?

   a. Yes
   b. No
   c. Uncertain

Part II: Identification (Continued)
Page 3

6. Continued

If yes, how often?

a. Every year
b. Every two years
c. Every _____ year(s)

7. Do you think that there are many gifted students in your school who are not in the existing gifted program at your school?

a. Yes
b. No
c. Uncertain

8. According to the U. S. Department of Education's definition of giftedness (see enclosure), do you think you have some students who, in your opinion, are gifted in leadership, shop, or creativity, but who are not included in the gifted program?

a. Yes
b. No
c. Uncertain

If yes, please give the number of students in Vocational Agriculture that you feel are gifted in selected areas, but who are not in the gifted program:

a. Leadership _____
b. Shop _____
c. Creativity _____
d. Other area(s)_____

9. Do you think that there should be a better identification procedure for gifted students in your school?

a. Yes
b. No
c. Uncertain

10. Does the school administration provide you with a list of gifted students in your classes at the beginning of the school year?

a. Yes
b. No
c. Uncertain

Part III: Curricular and Co-Curricular Activities

Circle one or more responses for each item.

11. What teaching procedures do you use to teach your gifted students?

    a. Special group teaching
    b. Giving them special attention and giving them special activities
    c. No difference in teaching procedures
    d. Other (please specify)_____

12. List the curricular activities your school has for gifted students:

    a. Individualized instruction
    b. Acceleration
    c. Grade-skipping in certain classes
    d. Teaching them entirely different things
    e. Other activities (please specify):_____
    _____.

13. Do you use any special community and/or parental involvement activities for the enrichment of gifted students?

    a. Yes
    b. No
    c. Uncertain

14. Do you arrange special field trips for gifted students?

    a. Yes
    b. No
    c. Uncertain

    If yes, please give the number of field trips in the following areas:

    a. Farm Visits - Number of Visits_____
    b. Greenhouse Visits - Number of Visits_____
    c. Agribusiness Visits - Number of Visits_____
    d. Other_____ - Number of Visits_____

15. Is the instruction of the gifted students in your classes directed toward their college preparation?

    a. Yes
    b. No
    c. Uncertain

Part III: Curricular and
Co-Curricular Activities
Page 5

16. The curriculum for the gifted students in my classes is directed toward:

    a. Agricultural occupations
    b. College preparation
    c. General education
    d. Uncertain

17. Are any special extra-curricular activities provided for your gifted students?

    a. Yes
    b. No
    c. Uncertain

    If yes, please specify:_____

Part IV: Career Awareness

18. Does your department have career awareness programs for students before they enter Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

19. Does your department have any career awareness program(s) to attract gifted students to the program?

    a. Yes
    b. No
    c. Uncertain

    If yes, please name the programs:_____

    _____

20. Does your department make any special effort to attract gifted students (for example - visiting students individually, contacting parents, etc.)?

    a. Yes
    b. No
    c. Uncertain

    If yes, please give a brief description of the efforts:_____

    _____

    _____

Part IV: Career
Awareness
Page 6

21. In your opinion, does your school favor gifted students to enter a college-bound curriculum rather than Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

22. Do you feel that Vocational Agriculture can be very useful in the enrichment of gifted students?

    a. Yes
    b. No
    c. Uncertain

    If yes, please describe how: _____

23. Do you believe that there is a great deal of opportunity for gifted students in Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

24. Do you feel that more information is required on how to attract gifted students to Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

25. Do you feel that more information is needed on how to teach gifted students in Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

26. Does your department teach career decision-making skills as part of the curriculum?

    a. Yes
    b. No
    c. Uncertain

    If yes, please describe the study unit:_____

    _____

    _____

Part IV: Career Awareness
Page 7

27. Do you know of any gifted students who enrolled in the Vocational Agriculture program and then dropped the program? (If possible, please go back five years.)

    a. Yes
    b. No
    c. Uncertain

    If yes, please give the number of students _____ and their reasons for dropping Vocational Agriculture, if known:_____

    _____

    _____.

28. Do you think that there should be special counseling of the gifted students who have enrolled in Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

29. Do you feel that programs in Vocational Agriculture for gifted students should be more flexible than programs for other students and more directed toward career exploration and preparation?

    a. Yes
    b. No
    c. Uncertain

30. Please circle areas of your Vocational Agriculture program:

    a. Agriculture Production
    b. Ornamental Horticulture
    c. Agricultural Mechanics
    d. Agricultural Supply and Service
    e. Forestry
    f. Agricultural Resources
    g. Agricultural Product Processing and Marketing
    h. Others:_____

    _____

31. Please include any relevant information about the gifted students in your classes which was not covered in this questionnaire.

V. KNOWLEDGE OF GIFTED CHILDREN

Read each of the statements carefully. Decide whether choice "a" or choice "b" is correct. Enter letter "a" or :b: in the column on the right. Please answer all questions.

1. In 1975, (a) 18%, (b) 35% of the highest-ranking tenth of the nation's high school graduates did not enter college. 1. _____

2. Eli Whitney invent the cotton gin when he was (a) 21, (b) 35 2. _____

3. (a) 25%, (b) 75% of gifted children learn to read before they enter school. 3. _____

4. Gifted children have (a) more, (b) fewer adjustment problems than average children. 4. _____

5. Gifted children are usually thought of as having IQ's of (a) 115, (b) 130 or higher. 5. _____

6. Gifted children should be accelerated not more than (a) one, (b) three grades in school. 6. _____

7. (a) 65%, (b) 75% of the 14,118 National Merit winners of 1977 received at least one scholarship. 7. _____

8. At age six, gifted children, on the average, are (a) ½, (b) 2 inches taller than other children. 8. _____

9. The first tractor was built by John Deere at the age of (a) 18, (b) 25. 9. _____

10. The majority of gifted students should enter college by the time they are (a) 15, (b) 19. 10. _____

11. Gifted students earn (a) more, (b) fewer graduate degrees than average students. 11. _____

12. Gifted children are usually advanced in (a) few, (b) many areas. 12. _____

13. Morrill proposed the Land Grant Act at the age of (a) 30, (b) 55. 13. _____

14. The play preferences of gifted students are (a) one, (b) four years beyond their age norms in interest. 14. _____

15. Cyrus McCormick invented the reaper when he was (a) 10, (b) 17 15. _____

16. Gifted children are (a) frequently, (b) infrequently selected as student body leaders. 16. _____

V. Knowledge of
Gifted Children
Page 9

17. Schools waste (a) 35%, (b) 65% of a gifted students time in an average classroom. 17. _____

18. Robert's study of 1972 showed that (a) 9½%, (b) 3½% of maladjusted children seem in psychiatric clinics were gifted. 18. _____

NOTE: Questions 2, 5, 7, 9, 11, 13, 15, and 16 serve as filler questions. The choices to the remaining questions are all wrong to an equal degree, with choices 1a, 3b, 4b, 6b, 8b, 10a, 12b, 14a, 17b, and 18a reflecting positive attitudes.

APPENDIX B

QUESTIONNAIRE FOR ADMINISTRATORS

THE PENNSYLVANIA STATE UNIVERSITY
102 ARMSBY BUILDING
UNIVERSITY PARK, PENNSYLVANIA 16802

College of Agriculture
Department of Agricultural Education

Area Code 814
863-0443

February 20, 1980

Dear Administrator:

Your help is urgently needed.

The Department of Agricultural Education, the Pennsylvania State University, is undertaking a study with a national stratified sample of vocational agriculture teachers and their administrators aimed at assessing the status of gifted and talented students in vocational agriculture classes. At present, no one knows how many gifted students are enrolled in vocational agriculture classes or how teachers respond to such students. Your response to the enclosed survey will be helpful to school administrators, school teachers, researchers, and students, in the preparation of future leaders of agriculture. The definition of gifted students is given on the next page for your information.

I am requesting that you complete the enclosed questionnaire and return the form using the enclosed, self-addressed envelope.

Thank you for this very important contribution. You may be assured that after the data are transferred to computer cards, this questionnaire will be destroyed and your anonymity is guaranteed.

Sincerely,

Himanshu Pandya

HIMANSHU PANDYA
Graduate Student

Samuel M. Curtis

DR. SAMUEL M. CURTIS
Professor of Agricultural Education, Thesis Aivisor

HP/vw

Enclosures: (2)

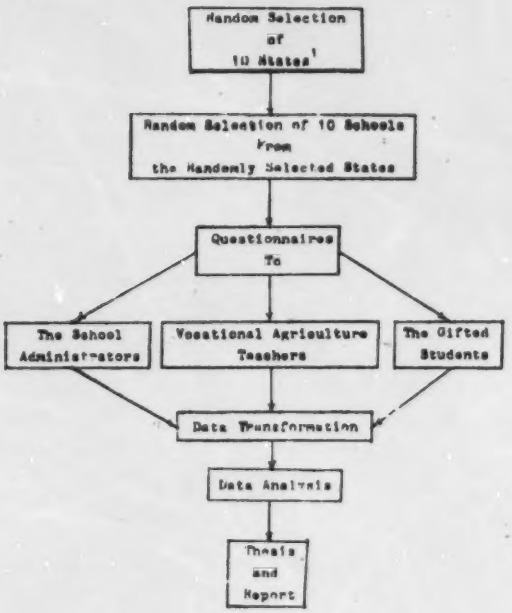
Definition - Gifted and Talented Student

Gifted and talented children are those who, by virtue of outstanding capabilities, are capable of high performance. These include those who have demonstrated any of the following abilities or aptitudes, singly or in combination:

1. General intellectual ability
2. Specific academic aptitude
3. Creative or productive thinking
4. Leadership ability
5. Visual and performing art aptitude
6. Psychomotor ability.

(U. S. Office of Education)

Flow-Chart of the Procedure



[1]Excluding - Hawaii, Alaska, and Pennsylvania (Pennsylvania will be sampled separately and all schools teaching vocational agriculture will be included).

INFORMED CONSENT FORM

The Pennsylvania State University

Title of Investigation: Status of Gifted Students in Vocational Agriculture Classes in the United States

Investigator(s): Mr. Himanshu Pandya, Dr. S. M. Curtis

Date: April 15, 1980

This is to certify that I, _____, hereby (give permission to have my child) agree to participate as a volunteer in a scientific investigation (experiment, program, study) as an authorized part of the education and research program of The Pennsylvania State University under the supervision of Mr. Pandya. The purpose and procedures of this study are explained on the back of the form.

I understand that I am free to deny any answer to specific items or questions in interviews or questionnaires.

I further understand that I am free to withdraw my consent and terminate my participation at any time.

Date	Date of Birth	Subject's Signature

I, the undersigned, have defined and fully explained the investigation to the above subject.

Date	Investigator's Signature

Purpose of the Study

The forgotten student on the American educational scene is the gifted and talented student interested in vocational education. A pilot study revealed that 40 to 50 percent of the vocational agricultural departments in Pennsylvania have gifted student(s) in their program. At present, there is a lack of information regarding the status of gifted students in vocational agricultural classes in the United States. It is not known what efforts are being made to assure that the potential of gifted and talented students is being challenged. The purpose of this study is to collect information regarding the present status including the areas of: identification, curricular and co-curricular activities, and career awareness for gifted and talented students in vocational agriculture.

This research survey will be useful to agriculture teachers, administrators, researchers who plan programs, and to students, in the better preparation of future leaders of agriculture.

Procedure of the Study

The sample for this study consists of all Pennsylvania agriculture departments and a random sample of 100 other vocational agriculture teachers in the United States, their school administrators, and the gifted students who had enrolled in vocational agriculture and who graduated during 1974 to 1979 (also see the attached page with the questionnaire for more procedural information).

Information from the completed questionnaires will be transferred to data-process cards for analysis. Once the data are analyzed, the questionnaire will be destroyed to protect your anonymity.

ADMINISTRATOR'S SURVEY OF GIFTED STUDENTS IN HIGH SCHOOL VOCATIONAL AGRICULTURE

ADMINISTRATOR'S POSITION:_____

SCHOOL:_____

(It is not necessary that you identify your position and school, however, it would be helpful in the event we need to contact you again. The number in the right hand corner is for computer identification and data analysis only.)

Part I: General Information

1. Total student population of the school: _____

2. Total gifted students in the school, including Vocational Agriculture students: _____.

3. Total number of gifted students enrolled in Vocational Agriculture: _____

4. Total enrollment in Vocational Agriculture: Boys: _____ Girls: _____

5. Is your gifted student program mandated by the state?

   a. Yes
   b. No
   c. Uncertain

Part II: Identification

Please circle one or more responses for each item.

6. This school district uses one or more of the following method(s) for the identification of gifted students:

   a. Use of IQ test(s)
   b. Parental identification
   c. Teachers' identification
   d. Other (please specify)_____

7. To qualify for gifted student status in this school, a student must have:

   a. An IQ higher than 130
   b. Creativity and talent in some area of study
   c. High leadership ability
   c. Other qualities (please specify)_____

Part II: Identification
(Continued)
Page 2

8. Do you feel that borderline students who were not selected for the gifted students program should be retested?

   a. Yes
   b. No
   c. Uncertain

   If yes, how often?

   a. Every year
   b. Every two years
   c. Every _____ year(s)

9. Do your think that there are many gifted students in your school who are not in the existing gifted program at your school?

   a. Yes
   b. No
   c. Uncertain

10. Do your think that there should be a better identification procedure for gifted students in your school?

    a. Yes
    b. No
    c. Uncertain

11. Does the school administration provide a list of gifted students to all teachers at the beginning of the school year?

    a. Yes
    b. No
    c. Uncertain

Part III: Curricular and Co-Curricular Activities

Circle one or more responses for each item.

12. In my school, teachers are using the following procedures for gifted students:

    a. Special group teaching
    b. Giving them special attention and giving them special activities
    c. No difference in teaching procedures
    d. Other (please specify)_____

Part III: Curricular and
Co-Curricular Activities
(Continued)
Page 3

13. List the curricular activities your school has for gifted students:

    a. Individualized instruction
    b. Acceleration
    c. Grade-skipping in certain classes
    d. Teaching them entirely different things
    e. Other activities (please specify)_____
    _____

14. Does your school use any special community and/or parental involvement activities for the enrichment of gifted students?

    a. Yes
    b. No
    c. Uncertain

15. Does your school arrange special field trips for gifted students?

    a. Yes
    b. No
    c. Uncertain

16. Is the instruction of the gifted students in your school directed toward their college preparation?

    a. Yes
    b. No
    c. Uncertain

17. Are any special extra-curricular activities provided for the gifted students?

    a. Yes
    b. No
    c. Uncertain

Part IV: Career Awareness

18. Does your school have career awareness programs for all gifted students?

    a. Yes
    b. No
    c. Uncertain

19. In your opinion, does your school favor gifted students to enter a college bound curriculum rather than vocational agriculture.

    a. Yes
    b. No
    c. Uncertain

Part IV: Career Awareness
(Continued)
Page 4

20. Do you feel that Vocational Agriculture can be very useful in the enrichment of gifted students?

    a. Yes
    b. No
    c. Uncertain

    If yes, please describe how._____

    _____

21. Do you believe that there is a great deal of opportunity for gifted students in Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

22. Do you feel that more information is needed on how to teach gifted students in Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

23. Do you think that there should be special counseling of the gifted students who have enrolled in Vocational Agriculture?

    a. Yes
    b. No
    c. Uncertain

24. Do you feel that programs in Vocational Agriculture for gifted students should be more flexible than programs for other students and more directed toward career exploration and preparation?

    a. Yes
    b. No
    c. Uncertain

Page 5

V. KNOWLEGE OF GIFTED CHILDREN

Read each of the statements carefully. Decide whether choice "a" or choice "b" is correct. Enter letter "a" or "b" in the column on the right. Please answer all questions.

1. In 1975, (a) 18%, (b) 38% of the highest-ranking tenth of the nation's high school graduates did not enter college. 1. _____

2. Eli Whitney invented the cotton gin when he was (a) 21, (b) 35. 2. _____

3. (a) 25%, (b) 75% of gifted chidlren lean to read before they enter school. 3. _____

4. Gifted children have (a) more (b) fewer adjustment problems than average children. 4. _____

5. Gifted children are usually thought of as having IQ's of (a) 115, (b) 130 or higher. 5. _____

6. Gifted children should be accelerated not more than (a) one grade, (b) three grades in school. 6. _____

7. (a) 65%, (b) 75% of the 14,118 National Merit winners of 1977 received at least one scholarship. 7. _____

8. At age six, gifted children on the average are (a) ½, (b) 2 inches taller than other children. 8. _____

9. The first tractor was built by John Deere at the age of (a) 18, (b) 25. 9. _____

10. The majority of gifted students should enter college by the time they are (a) 15, (b) 19. 10. _____

11. Gifted students earn (a) more, (b) fewer graduate degrees than average students. 11. _____

12. Gifted children are usually advanced in (a) few, (b) many areas. 12. _____

13. Morrill proposed the Land Grant Act at the age of (a) 30, (b) 55. 13. _____

14. The play preferences of gifted students are (a) one, (b) four years beyond their age norms in interest. 14. _____

V. Knowledge of
Gifted Children (Continued)
Page 6

15. Cyrus McCormick invented the reaper when he was (a) 10, (b) 17 years old. 15. _____

16. Gifted children are (a) frequently, (b) infrequently selected as student body leaders. 16. _____

17. Schools waste (a) 35%, (b) 65% of a gifted student's time in an average classroom. 17. _____

18. Robert's study of 1972 showed that (a) 9½%, (b) 3½% of maladjusted children seen in psychiatric clinics were gifted. 18 _____

APPENDIX C

QUESTIONNAIRE FOR GIFTED VOCATIONAL AGRICULTURE GRADUATES

THE PENNSYLVANIA STATE UNIVERSITY
102 ARMSBY BUILDING
UNIVERSITY PARK, PENNSYLVANIA 16802

College of Agriculture
Department of Agricultural Education

Area Code 814
863-0443

May 28, 1980

Dear Former Vocational Agriculture Student:

Your help is urgently needed.

The Department of Agricultural Education, the Pennsylvania State University, is undertaking a study with a national stratified sample of vocational agriculture teachers, their gifted students (who graduated during 1974 to 1979), and their administrators, aimed at assessing the status of gifted and talented students in vocational agriculture classes. At present, no one knows how many gifted students are enrolled in vocational agriculture classes or how teachers respond to such students. Also, no one knows what happened to those gifted students who graduated in vocational agriculture during 1974-1979. Your response to the enclosed survey will be helpful to school administrators, school teachers, researchers, and students, in the preparation of future leaders of agriculture. The definition of gifted students and study procedure is given on the next page for your information.

I am requesting that you complete the enclosed questionnaire and Informed Consent Form and return the forms using the enclosed, self-addressed envelope.

Thank you for this very important contribution. You may be assured that after the data are transferred to computer cards, this questionnaire will be destroyed and your anonymity is guaranteed.

Sincerely,

Himanshu Pandya

HIMANSHU PANDYA
Graduate Student

Samuel M. Curtis

DR. SAMUEL M. CURTIS
Professor of Agricultural Education, Thesis Advisor

HP:v

Enclosures: (3)

AN EQUAL OPPORTUNITY UNIVERSITY

INFORMED CONSENT FORM

The Pennsylvania State University

Title of Investigation: Status of Gifted Students in Vocational Agriculture Classes in the United States

Investigator(s): Mr. Himanshu Pandya, Dr. S. M. Curtis

Date: April 15, 1980

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Date	Date of Birth	Subject's Signature

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Information from the completed questionnaires will be transferred to data-process cards for analysis. Once the data are analyzed, the questionnaire will be destroyed to protect your anonymity.

-1-

No. _____

Survey of Gifted and Talented Vocational Agriculture Graduates

Student's Name: _____

School: _____

(It is not necessary that you identify your name and school. If you are under 18 years of age, please ask your parent or guardian to sign the informed consent form enclosed, and return the form with the survey. The number in the right hand corner is for computer identification and data analysis only.)

1. Year of graduation _____

2. Employment from graduation until today.

Name of Occupation	Dates		Reason for Changing Occupation
	From	To	
a.			
b.			
c.			
d.			
e.			

3. Are you satisfied with your present occupation?

   a. Yes

   b. No

   c. Uncertain

   If no, explain. _____

   _____

4. Do you feel that your preparation in vocational agriculture was adequate for your occupation(s)?

   a. Yes
   b. No
   c. Uncertain

   If No, what were the weak points in your school preparation?

5. What was the strongest point(s) in your school's vocational agriculture program?

6. Who influenced you to enroll in vocational agriculture?

   a. Agriculture teacher
   b. Parent(s)
   c. Guidance counseler
   d. Yourself
   e. Fellow students
   f. Others _____

7. If you could start over again, would you still enroll in vocational agriculture?

   a. Yes
   b. No
   c. Uncertain

8. Would you advise gifted students to enroll in vocational agriculture?

   a. Yes
   b. No
   c. Uncertain

9. Did you receive any special instruction as a gifted student in vocational agriculture classes? (For example - special grouping, special activities, special attention.)

   a. Yes
   b. No
   c. Uncertain

10. Have you ever held office in FFA?

    a. yes

    b. no

    c. Uncertain